just visible in **FIG. 1**) is operable to control the operation of one or more inlet valves of the associated injector engine cylinder. A third one of the rocker arms (not shown) is operable to control the operation of one or more exhaust valves of the associated injector engine cylinder. Each of the second and third rocker arms has an associated cam arrangement, similar to parts **24**, **27**. The manner in which the second and third rocker arms control operation of the inlet and exhaust valves of the engine cylinder is well known and would be familiar to a person skilled in diesel engine technology, and so will not be described in further detail here.

[**0033**] As can be seen in more detail in **FIG. 2**, the rocker shaft **32** is provided with first and second axially extending passages, **46**, **48** respectively, formed by drillings through the shaft **32**. The first passage **46** defines an oil flow passage for lubricating oil for the three rocker arms **30**. It is a particular feature of the invention that the second passage **48** defines the common rail fuel volume **12**, so that the rail volume forms an internal volume within the rocker shaft **32**. The rail volume **12** may be provided, preferably at one end, with a rail pressure sensor (not shown). The rail pressure sensor provides an output signal indicative of fuel pressure within the rail volume **12** and rail pressure may be controlled in response to this signal to ensure it is maintained at a substantially constant value.

[**0034**] The rail passage **48** extending through the rocker shaft **32** is arranged to deliver fuel to each of the injectors **10** through a fuel supply passage **54**. The fuel supply passage **54** has a rail-end connector **56** (visible in **FIG. 2** only) and an injector-end connector **58** (visible in **FIG. 1** only).

[**0035**] **FIG. 3** shows alternative locations for the rail passage **48** and the oil passage **46** within the shaft **32**. Although it is known to provide the oil passage **48** through the rocker shaft **32** in existing fuel systems, due to the requirement for the additional passage **48** to be provided through the rocker shaft **32** to define the rail volume **12**, the oil passage **46** must be of smaller diameter and displaced off-centre from the shaft axis to ensure there is sufficient space available for the passage **48**.

[**0036**] The rocker shaft **32** may also be provided with various oil drillings (not shown) in a conventional manner, which permit lubricating oil to be supplied to rocker arm bearings and the pumping element **18** of the unit injector **10** from the passage **46**.

[**0037**] As it is necessary to provide the rocker shaft **32** in the engine for a purpose other than defining the rail volume **12**, it is a particular advantage of the present invention that there is no requirement for an additional common rail component within the fuel system as an existing part of the engine is utilised for this purpose. By defining the rail volume **12** within the existing rocker shaft component of the engine a considerable advantage is obtained in terms of accommodation space. The common rail component of a fuel system is also a particularly heavy component and so the elimination of this housing part altogether from the engine, by defining the rail volume within an already existing component, provides a significant weight and cost advantage also.

[**0038**] The invention is particularly applicable to hybrid unit injector-common rail fuel systems, as described previously, where the pressure demands for the rail volume are reduced due to the ability of the unit injectors **10** to increase rail pressure to higher injection pressures by virtue of their dedicated pumping elements **18** and rail control valves. The rail volume **12** can therefore be defined within a component having relatively thin walls, such as the rocker shaft **32**.

[**0039**] The invention is equally applicable, however, to systems where the rail volume **12** supplies fuel to the injectors but in which there is no additional pumping element **18** in the injectors to increase fuel pressure above rail pressure. The invention therefore applies equally to more conventional common rail fuel systems in which rocker arms are provided on a rocker shaft **32** for controlling operation of the inlet and/or exhaust valves of the engine cylinders only, but in which no third rocker arm (e.g. rocker arm **30**) is required.

[**0040**] The invention is also applicable if the injectors take the form of unit pumps, which have a dedicated pumping element for increasing fuel pressure above rail pressure, but where the associated injector for each pumping element is spaced remotely from its pumping element, the pump and injector components being connected by a high pressure fuel line.

[**0041**] In another embodiment of the invention, the rocker shaft **32** may be provided with a plurality of accumulator volumes, each of which is defined by a separate passage and/or internal volume within the shaft **32** and is arranged to supply fuel to a different one or more of the injectors of the associated fuel system.

[**0042**] In yet another embodiment of the invention, and as indicated by the dashed feature identified by **112** in **FIG. 1**, instead of defining the rail volume **12** within the rocker shaft **32**, the rail volume **112** may be defined within the engine cylinder head **16**. Again, as the rail volume **112** is integrally formed within an already existing part of the engine, there is no need to provide a separate rail volume component and, hence, the aforementioned weight and cost advantages are obtained. The fuel system of this embodiment may be provided with any of the aforementioned types of injector or unit pump.

[**0043**] Obviously, many modifications and variations of the present invention are possible in light of the above teachings. The invention may be practiced otherwise than as specifically described within the scope of the appended claims.

What is claimed is:

1. An accumulator fuel system for an internal combustion engine having a plurality of engine cylinders, the fuel system including:

an accumulator fuel volume for supplying high pressure fuel to one or more of a plurality of injectors, each of which is arranged to supply fuel to an associated one of the engine cylinders,

wherein the accumulator fuel volume is integrated within an engine component provided for a purpose other than that solely of an accumulator fuel volume for storing high pressure fuel.

2. The accumulator fuel system as claimed in claim 1, wherein the system includes a rocker shaft upon which a rocker member is pivotally mounted, wherein the rocker